

Biomass Burn Observation Project – Instrument Suite

This field campaign will leverage the capabilities of several new instruments or instrument combinations that have not been previously used in aircraft. (See Schmid_BBOP_G-1.pdf for more details on instrument suite)

Microphysical Properties:

- SP-AMS
- FIMS
- Microscopy (TEM)
- SP2
- Dual column CCN
- UHSAS/PCSAP
- Particle counter

Trace gas

- PTRMS
- H₂O, CH₄, N₂O, NO, NO₂, NO_y, CO, CO₂, O₃ and SO₂

Optical Properties

- 3- λ nephelometer
- 3- λ PSAP
- 1- λ PAS (355 nm)
- 1- λ PTI (532 nm)
- 1- λ CAPS (extinction, 628 nm)

Radiation

- SW, Upwelling hemispheric, spectral
- SW, Upwelling hemispheric, broadband
- IR. Surface Temperature
- SW, Down-welling hemispheric, broadband, global and diffuse
- SW, Down-welling hemispheric, broadband, diffuse